

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 10-13, 15 and 24-29 are presently pending in this application, Claims 1-9 and 16-23 having been withdrawn from further consideration by the Examiner, Claims 1-9 and 16-23 having been canceled, Claims 10-13 having been amended, and Claims 24-29 having been newly added by the present amendment.

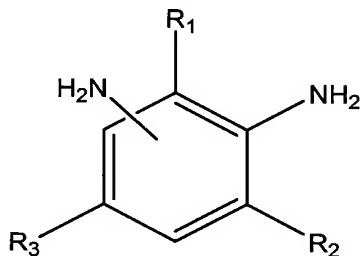
In the outstanding Office Action, Claims 10-12 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Slagel (U.S. Patent 6,127,505) in view of Orlosky (U.S. Patent 4,693,446) and Andino et al. (U.S. Publication 2002/0163095). However, Claims 13 and 14 were indicated as including allowable subject matter.

First, Applicants acknowledge with appreciation the indication that Claims 13 and 14 include allowable subject matter. Accordingly, Claim 13 has been rewritten, amended for clarification and presented as a new independent claim, Claim 24. However, Claims 10 and 13 have been amended herein, because Applicants believe that amended Claims 10 and 13 include allowable subject matter as discussed below.

Claims 10-13 have been amended and Claims 24-29 have been added herein. These amendments and additions in the claims are believed to find support in the specification and/or claims as originally filed, for example, the specification: page 22, the second paragraph; pages 35-37; page 59, the second paragraph; pages 61-62 (Example 3); and page 51, the third paragraph, and no new matter is believed to be added thereby. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

Before addressing the rejection based on the cited references, a brief review of Claim 10 as currently amended is believed to be helpful. Claim 10 is directed to a method of

manufacturing a plastic lens and recites: “mixing components (A) and (B), the component (A) comprising an isocyanate terminal prepolymer in a form of a reaction product of an aliphatic diisocyanate having an intramolecular cyclic structure and a diol having an average molecular weight of 300-2,500, the component (B) comprising at least one aromatic diamine denoted by a formula (I) having a structure,



where in the formula (I), R₁, R₂ and R₃ are each independently one of a methyl, ethyl and thiomethyl group; casting a mixture of said components (A) and (B) into a casting mold; and polymerizing the mixture to obtain a molded article, wherein the mixing of the components (A) and (B) is carried out after heating said component (A) to reduce viscosity of said component (A), said casting mold has a mold for forming one side of the lens and a mold for forming the other side thereof that are positioned opposite at a prescribed interval, a circular gasket is positioned around said molds, and a cavity is formed by said molds and gasket, said gasket has a casting hole for casting the mixture of said components (A) and (B) into said cavity and a discharge hole for discharging gas and said mixture in said cavity to an exterior of the casting mold, that are positioned opposite in a diameter direction, said casting into the casting mold is carried out in a state that said casting mold is tilted from or perpendicular to a horizontal plane as well as said discharge hole is positioned at a top, and said polymerizing comprises leaving the casting mold in a low-temperature atmosphere to polymerize said mixture in the casting mold by a self-heating of said mixture and leaving the casting mold in a high-temperature atmosphere to further proceed polymerization of said mixture after a temperature of the self-heating reaches a maximum peak.”

It is respectfully submitted that none of Slagel, Orlosky and Andino et al. teaches or suggests “said polymerizing comprises leaving the casting mold in a low-temperature atmosphere to polymerize said mixture in the casting mold by a self-heating of said mixture and leaving the casting mold in a high-temperature atmosphere to further proceed polymerization of said mixture after a temperature of the self-heating reaches a maximum peak” as recited in amended Claim 10.

That is, the components (A) and (B) polymerize at a very high rate, and their polymerization at a high temperature raises viscosity rapidly, resulting in generation of a significant amount of bubbles and optical defects in the plastic lens. By carrying out the polymerization of the components (A) and (B) in a low-temperature atmosphere while the polymerization substantially proceeds, *i.e.*, before the temperature of the self-heating reaches a maximum peak, the generation of bubbles and optical defects can be avoided.

On the other hand, Slagel describes that polymerization is carried out in two different temperatures but does not disclose that polymerization at high temperature be carried out after a temperature of self-heating reaches a maximum peak.¹ Furthermore, if the polymerization were carried out only in low temperature atmospheres, unreacted functional groups remain, and a product would not have a high strength. Therefore, it is respectfully submitted that the subject matter recited in amended Claim 10 is believed to be clearly distinguishable from Slagel.

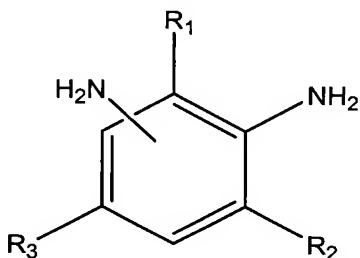
Orlosky and Andino et al. are cited for the structure of a casting mold and the tilting of a mold cavity during casting, respectively, and are not believed to teach or suggest “said polymerizing comprises leaving the casting mold in a low-temperature atmosphere to polymerize said mixture in the casting mold by a self-heating of said mixture and leaving the casting mold in a high-temperature atmosphere to further proceed polymerization of said

¹ See, for example, Slagel, column 8, lines 13-15.

mixture after a temperature of the self-heating reaches a maximum peak” as recited in amended Claim 10. Thus, the subject matter recited in amended Claim 10 is believed to be distinguishable from Orlosky and Andino et al.

Because none of Slagel, Orlosky and Andino et al. discloses the polymerization as recited in amended Claim 10, their teachings even in combination are not believed to render the method recited in Claim 10 obvious.

Likewise, Claim 13 is directed to a method of manufacturing a plastic lens and has been amended to recite “mixing components (A) and (B), the component (A) comprising an isocyanate terminal prepolymer in a form of a reaction product of an aliphatic diisocyanate having an intramolecular cyclic structure and a diol having an average molecular weight of 300-2,500, the component (B) comprising at least one aromatic diamine denoted by a formula (I) having a structure,



where in the formula (I), R₁, R₂ and R₃ are each independently one of a methyl, ethyl and thiomethyl group; casting a mixture of said components (A) and (B) into a casting mold; and polymerizing the mixture to obtain a molded article, wherein the mixing of the components (A) and (B) is carried out after heating said component (A) to reduce viscosity of said component (A), said casting mold has a mold for forming one side of the lens and a mold for forming the other side thereof that are positioned opposite at a prescribed interval, a circular gasket is positioned around said molds, and a cavity is formed by said molds and gasket, said gasket has a casting hole for casting the mixture of said components (A) and (B) into said cavity and a discharge hole for discharging gas and said mixture in said cavity to an

exterior of the casting mold, that are positioned opposite in a diameter direction, said casting into the casting mold is carried out in a state that said casting mold is tilted from or perpendicular to a horizontal plane as well as said discharge hole is positioned at a top, and the polymerizing comprises leaving the casting mold in a low-temperature atmosphere to polymerize said mixture in the casting mold, severing a polymerized portion within the cavity respectively from outside of the cavity in the vicinity of at least one of the casting hole and the discharge hole, and leaving the casting mold in a high-temperature atmosphere to further proceed polymerization of the mixture.” Thus, Claim 13 is also believed to be distinguishable from Slagel, Orlosky and Andino et al.

For the foregoing reasons, Claims 10 and 13 are believed to be allowable along with Claim 24. Furthermore, since Claims 11, 12, 15 and 25-29 depend directly or indirectly from one of Claims 10, 13 and 24, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 11, 12, 15 and 25-29 are believed to be allowable as well.

In light of the prior indication of allowable claims and in view of the amendments presented above, the present application is believed to be in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Akihiro Yamazaki
Attorney of Record
Registration No. 46,155

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)